

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P600910

Luminaire Tested: UHBS-18-MV-L850-U 277V

Issue Date: 8/26/2022

Test Information

Test Method: LM-79-2019
Report Number: P600910
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ()
Test Lab: INNOVATION CENTER
Issue Date: 8/26/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: UHBS-18-MV-L850-U 277V
Description: UHB Round Select AT 18000 LUMEN SETTING AND 5000K
Light Source: -
Ballast/Driver: -

Summary

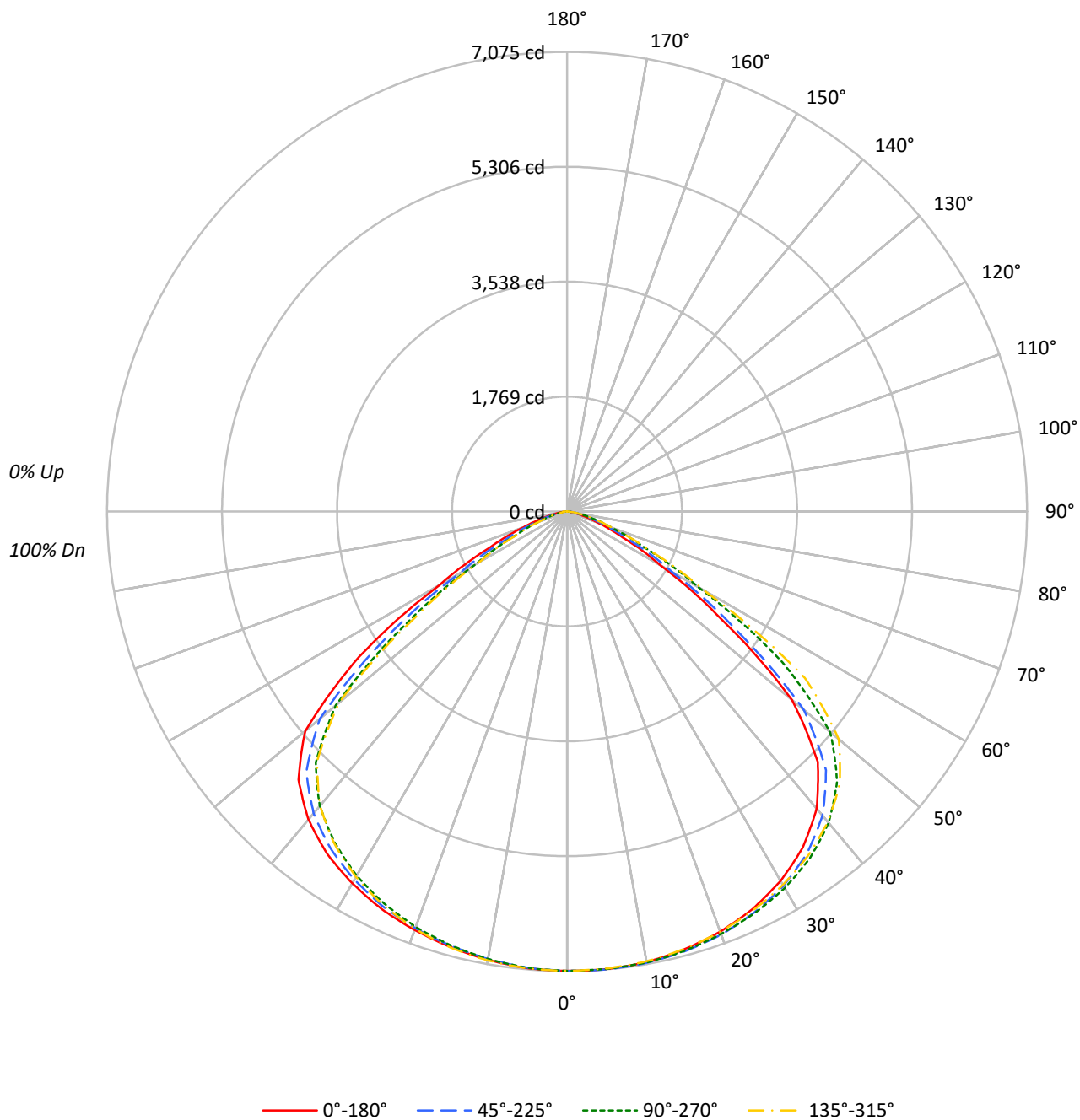
Lumens per Lamp: 18728 (1 lamp)
Luminaire Lumens: 18728.0 lumens
Efficiency: 100.0%
Efficacy: 152.3 lumens/watt
Spacing Criteria (0/90/45): 1.39 / 1.39 / 1.49
Luminous Opening: Circular (Dia: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 123
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P600910
CATALOG NUMBER: UHBS-18-MV-L850-U 277V

Luminous Intensity Polar Plot



TEST NUMBER: P600910

CATALOG NUMBER: UHBS-18-MV-L850-U 277V

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	111	107	103	100	108	105	101	98	100	98	95	97	94	92	93	91	90
2	102	95	89	84	99	93	88	83	90	85	81	86	83	79	83	80	78
3	94	84	77	71	91	83	76	71	80	74	70	77	72	68	75	71	67
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	63	59
5	80	68	59	53	78	67	59	53	65	58	52	63	57	52	61	56	51
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40
8	63	51	42	37	62	50	42	37	49	42	36	47	41	36	46	40	36
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	29

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	96923	96923	96923	96923
5°	97280	97229	97098	97009
10°	98036	98097	97538	97332
15°	98999	99344	98487	98105
20°	100416	100950	99993	99242
25°	102110	103194	102098	100686
30°	103931	105932	104576	102440
35°	105720	108974	107644	104189
40°	106839	111963	110704	105832
45°	105701	113857	113211	105924
50°	96334	112687	112062	98901
55°	69551	96510	93301	72626
60°	45613	63923	61941	44289
65°	30548	42650	42381	28456
70°	19975	29308	28538	18573
75°	12799	20101	18697	11597
80°	6164	12091	11026	5872
85°	8035	6023	6007	7957

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 150°

Vertical Angle: 50°

Luminance: 116401 cd/sqm

TEST NUMBER: P600910
 CATALOG NUMBER: UHBS-18-MV-L850-U 277V

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	672.9	3.6	3.6
10°-20°	1969.4	10.5	10.5
20°-30°	3114.7	16.6	16.6
30°-40°	3985.3	21.3	21.3
40°-50°	4316.4	23.0	23.0
50°-60°	3084.0	16.5	16.5
60°-70°	1174.7	6.3	6.3
70°-80°	344.6	1.8	1.8
80°-90°	66.1	0.4	0.4
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	5757.0	30.7	30.7
0°-40°	9742.3	52.0	52.0
0°-60°	17142.6	91.5	91.5
0°-90°	18728.0	100.0	100.0
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	18728.0	100.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	7072	7072	7072	7072	7072	
5°	7071	7067	7058	7051	7071	674
15°	6977	7002	6941	6914	6977	1974
25°	6752	6824	6752	6658	6752	3116
35°	6319	6513	6434	6227	6319	3948
45°	5454	5874	5841	5465	5454	4130
55°	2911	4039	3905	3040	2911	2673
65°	942	1315	1307	878	942	998
75°	242	380	353	219	242	279
85°	51	38	38	51	51	63
90°	50	30	31	50	50	

TEST NUMBER: P600910
 CATALOG NUMBER: UHBS-18-MV-L850-U 277V

CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	7072.1	7072.1	7072.1	7072.1	7072.1	7072.1	7072.1	7072.1	7072.1	7072.1	7072.1
5°	7071.1	7074.3	7076.0	7067.4	7060.2	7059.8	7057.9	7057.0	7044.4	7051.4	7052.2
10°	7044.6	7052.9	7060.4	7049.0	7038.4	7026.0	7008.8	7001.7	6988.2	6994.0	7008.1
15°	6977.4	7003.1	7011.9	7001.7	6976.2	6964.6	6941.3	6932.4	6911.9	6914.4	6930.6
20°	6885.1	6918.8	6945.9	6921.7	6897.6	6876.9	6856.1	6839.4	6812.5	6804.6	6821.9
25°	6752.5	6796.1	6825.5	6824.2	6782.4	6765.8	6751.7	6723.6	6690.2	6658.3	6670.9
30°	6567.4	6629.8	6678.4	6693.9	6650.7	6626.5	6608.2	6571.7	6513.2	6473.2	6474.3
35°	6318.9	6391.1	6472.7	6513.4	6478.8	6456.4	6433.9	6381.2	6294.8	6227.4	6224.7
40°	5971.8	6060.3	6163.9	6258.2	6245.3	6230.1	6187.8	6117.3	6009.8	5915.5	5899.9
45°	5453.6	5553.1	5712.3	5874.4	5934.1	5927.6	5841.1	5738.0	5604.4	5465.1	5438.7
50°	4518.2	4614.7	4900.7	5285.2	5451.9	5459.4	5255.9	5053.4	4872.1	4638.6	4606.0
55°	2910.8	3030.5	3293.4	4039.1	4459.5	4470.9	3904.8	3514.3	3308.2	3039.5	2873.4
60°	1664.1	1777.6	1975.8	2332.1	2463.3	2416.2	2259.8	2052.8	1799.4	1615.8	1563.8
65°	942.0	1036.4	1165.4	1315.2	1382.0	1333.4	1306.9	1144.1	1016.7	877.5	866.2
70°	498.5	572.5	659.0	731.4	741.9	735.2	712.2	632.5	538.8	463.5	461.4
75°	241.7	286.8	338.5	379.6	381.0	372.6	353.1	313.5	256.0	219.0	212.4
80°	78.1	103.6	138.5	153.2	165.4	166.5	139.7	119.2	84.4	74.4	69.8
85°	51.1	52.1	54.0	38.3	39.9	40.7	38.2	35.2	32.5	50.6	50.8
90°	50.1	49.8	50.1	29.6	30.1	30.6	30.7	30.4	29.5	50.0	50.4

TEST NUMBER: P600910
CATALOG NUMBER: UHBS-18-MV-L850-U 277V

CANDELA DISTRIBUTION (continued):

	330°	360°
0°	7072.1	7072.1
5°	7064.5	7071.1
10°	7028.1	7044.6
15°	6964.2	6977.4
20°	6849.5	6885.1
25°	6704.7	6752.5
30°	6513.8	6567.4
35°	6259.8	6318.9
40°	5922.9	5971.8
45°	5432.6	5453.6
50°	4539.7	4518.2
55°	2865.7	2910.8
60°	1553.6	1664.1
65°	844.7	942.0
70°	452.3	498.5
75°	217.6	241.7
80°	68.4	78.1
85°	50.7	51.1
90°	50.4	50.1

(END OF REPORT)